

~~utilizing a lift arm having a defined length and a box boom configuration, the box boom configuration having a substantially rectangular cross-section that extends over a predetermined portion of the boom equal to or greater than one-half of the length;~~

~~actuating the cylinder so as to move a pin from a first pin position to a second pin position, wherein (i) the pin is spaced apart from the first coupling aperture when the pin is located in the first pin position, and (ii) the pin extends through the first coupling aperture when the pin is located in the second pin position; and~~

~~viewing the pin when the pin is located in the second pin position by the operator from a position within the cab, wherein the view of the pin by the operator from the position within the cab is unobstructed by the linkage assembly.~~

REMARKS

Reconsideration of the claims is respectfully requested.

Claims 1-3, 5-11, 13-18 and 20-25 are included in this application. By this amendment, Claims 21-25 have been amended. A prompt and favorable action on the merits is requested. Applicants would like to thank the Examiner for the allowance of Claims 1-3, 5-11, 13-18 and 20. No new matter has been added by this amendment.

Claims 21-22 and 24 were rejected under 35 U.S.C. 103(a) as being unpatentable over Burton (5769596) in view of Wiechman (6099236). Further, Claims 21-25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Burton (5769596) in view of Kovacs (5678979). Applicants have amended Claims 21-25 to clearly distinguish the claims from the prior art.

In particular, Claim 21 now recites that the lift arm has a predetermined length and a box boom configuration of a substantially rectangular cross-section that extends over a predetermined portion of the boom equal to or greater than one-half of the length. Burton and Kovacs both utilize a lift arm with a "slab type" configuration and do NOT use a box boom configuration. As shown in Figs. 7-9 of Applicants' invention and described on Page 13, lines 3-26, the box boom configuration is typically stiffer and stronger than a lift arm utilizing spaced slab arms. Therefore, there is an advantage to utilizing such a boom structure. Further, Weichman discloses utilization of a box boom type lift arm but the

configuration of the lift arm is much more similar to the slab type configurations in that the rectangular cross section is less than one half of the length of the lift arm. None of the prior art references teach or suggest an ability to view the pin of the cylinder from the cab of a work machine utilizing a lift arm having a box boom configuration with the cross-sectional area equivalent to Applicants' design. Because all claim limitations must be considered, and none of the prior art references teach or suggest utilization of such a box boom configuration, Independent Claim 21 should be allowable. Therefore, Applicants respectfully submit that Claim 21 is in condition for allowance and Applicants respectfully request the allowance of Claim 21.

Further, Claims 22-25 are dependent, either directly or indirectly, from Claim 21 and include additional limitations therein. Therefore, Applicants respectfully submit that Claims 22-25 are in condition for allowance and Applicants respectfully request the allowance of Claims 22-25.

The remaining cited references have been reviewed and it is believed that they are of no significance to the claims in issue.

In view of the foregoing amendment and remarks, it is submitted that claims 1-3, 5-11, 13-18 and 20-25 are fully in condition for allowance, and the passing on to issuance of the instant application is respectfully urged.

Respectfully submitted,


Diana L. Charlton
Diana L. Charlton
Registration No. 36,103
Caterpillar Inc.

Telephone: (309) 675-5083
Facsimile: (309) 675-1236
Enclosures
DLC:vlm
T:\VLM\97-679A1.DOC



Marked Up Copy of Amendments pursuant to 37 CFR 1.121

Title: METHOD OF VERIFYING COUPLING OF AN IMPLEMENT TO A WORK MACHINE

Application No. 09/016,739

Attorney Docket No. 99-679

Claims

21. (Amended) A method of verifying proper coupling of an implement assembly to a lift arm assembly by an operator who is located in a cab of a work machine, with (i) the work machine including the implement assembly, the lift arm assembly, and a linkage assembly mechanically coupled to the implement assembly (ii) the implement assembly including a hinge plate, (iii) the hinge plate having a first coupling aperture extending therethrough, (iv) the lift arm assembly having a lift arm and a cylinder, and (v) the cylinder being secured to the lift arm, comprising the steps of:

utilizing a lift arm having a defined length and [with] a box boom configuration, the box boom configuration having a substantially rectangular cross-section that extends over a predetermined portion of the boom equal to or greater than one-half of the length;

actuating the cylinder so as to move a pin from a first pin position to a second pin position, wherein (i) the pin is spaced apart from the first coupling aperture when the pin is located in the first pin position, and (ii) the pin extends through the first coupling aperture when the pin is located in the second pin position; and

viewing the pin when the pin is located in the second pin position by the operator [from] from a position within the cab, wherein the view of the pin by the operator [from] from the position within the cab is unobstructed by the linkage assembly.